

CLAIMS

1. A method of treating erectile dysfunction comprising administering a therapeutic amount of an erectile dysfunction drug condensation aerosol, having an MMAD less than 3 μm and less than 5% erectile dysfunction drug degradation products, to a patient by inhalation, upon activation by the patient of the formation of, and delivery of, the condensation aerosol.
2. The method of claim 1, wherein said condensation aerosol is formed by
 - a. volatilizing an erectile dysfunction drug under conditions effective to produce a heated vapor of the erectile dysfunction drug; and
 - b. condensing the heated vapor of erectile dysfunction drug to form condensation aerosol particles.
3. The method according to claim 2, wherein said administration results in a peak plasma concentration of said erectile dysfunction drug in less than 0.1 hours.
4. The method of claim 2, wherein the erectile dysfunction drug is selected from the group consisting of sildenafil, tadalafil, or vardenafil.
5. The method according to claim 3, wherein the administered aerosol is formed at a rate greater than 0.5 mg/second.
6. The method according to claim 1, wherein at least 50% by weight of the condensation aerosol is amorphous in form.
7. A method of treating erectile dysfunction comprising administering a therapeutic amount of sildenafil, tadalafil, or vardenafil condensation aerosol, having an MMAD less than 3 μm and less than 5% sildenafil, tadalafil, or vardenafil degradation products, to a patient by inhalation, upon activation by the patient of the formation of, and delivery of, the condensation aerosol.
8. The method of claim 7, wherein said condensation aerosol is formed by

- a. sildenafil, tadalafil, or vardenafil under conditions effective to produce a heated vapor of sildenafil, tadalafil, or vardenafil; and
 - b. condensing the heated vapor of sildenafil, tadalafil, or vardenafil to form condensation aerosol particles.
9. The method according to claim 7, wherein said administration results in a peak plasma concentration of sildenafil, tadalafil, or vardenafil in less than 0.1 hours.
10. The method according to claim 7, wherein at least 50% by weight of the condensation aerosol is amorphous in form.
11. The method according to claim 7, wherein said sildenafil condensation aerosol has an inhalable aerosol mass density of between 5 mg/L and 40 mg/L when delivered.
12. The method according to claim 7, wherein said tadalafil condensation aerosol has an inhalable aerosol mass density of between 2.5 mg/L and 20 mg/L when delivered.
13. The method according to claim 7, wherein said vardenafil condensation aerosol has an inhalable aerosol mass density of between 1 mg/L and 20 mg/L when delivered.
14. A method of administering an erectile dysfunction drug to a patient to achieve a peak plasma drug concentration rapidly, comprising administering to the patient by inhalation an aerosol of an erectile dysfunction drug having less than 5% erectile dysfunction drug degradation products and an MMAD less than 3 microns wherein the peak plasma concentration of the erectile dysfunction drug is achieved in less than 0.1 hours.
15. A method of administering sildenafil, tadalafil, or vardenafil to a patient to achieve a peak plasma drug concentration rapidly, comprising administering to the patient by inhalation an aerosol of sildenafil, tadalafil, or vardenafil having less than 5% of sildenafil, tadalafil, or vardenafil degradation products and an MMAD less than 3 microns wherein the peak plasma drug concentration of sildenafil, tadalafil, or vardenafil, is achieved in less than 0.1 hours.

16. A kit for delivering a drug aerosol comprising:
 - a) a thin coating of an erectile dysfunction drug composition and
 - b) a device for dispensing said thin coating as a condensation aerosol.
17. The kit of claim 16, wherein the erectile dysfunction drug in the composition is selected from the group consisting of sildenafil, tadalafil, or vardenafil.
18. The kit of claim 16, wherein the device for dispensing said coating of an erectile dysfunction drug composition as an aerosol comprises
 - (a) a flow through enclosure,
 - (b) contained within the enclosure, a metal substrate with a foil-like surface and having a thin coating of an erectile dysfunction drug composition formed on the substrate surface,
 - (c) a power source that can be activated to heat the substrate to a temperature effective to volatilize the erectile dysfunction drug composition contained in said coating, and
 - (d) inlet and exit portals through which air can be drawn through said device by inhalation,
wherein heating the substrate by activation of the power source is effective to form an erectile dysfunction drug vapor containing less than 5% erectile dysfunction drug degradation products, and drawing air through said chamber is effective to condense the erectile dysfunction drug vapor to form aerosol particles wherein the aerosol has an MMAD of less than 3 microns.
19. The kit according to claim 18, wherein the heat for heating the substrate is generated by an exothermic chemical reaction.
20. The kit according to claim 19, wherein said exothermic chemical reaction is oxidation of combustible materials.
21. The kit according to claim 18, wherein the heat for heating the substrate is generated by passage of current through an electrical resistance element.

22. The kit according to Claim 18, wherein said substrate has a surface area dimensioned to accommodate a therapeutic dose of an erectile dysfunction drug composition in said coating.
23. The kit according to claim 16, wherein a peak plasma concentration of erectile dysfunction drug is obtained in less than 0.1 hours after delivery of the condensation aerosol to the pulmonary system.
24. The kit of claim 16, further including instructions for use.